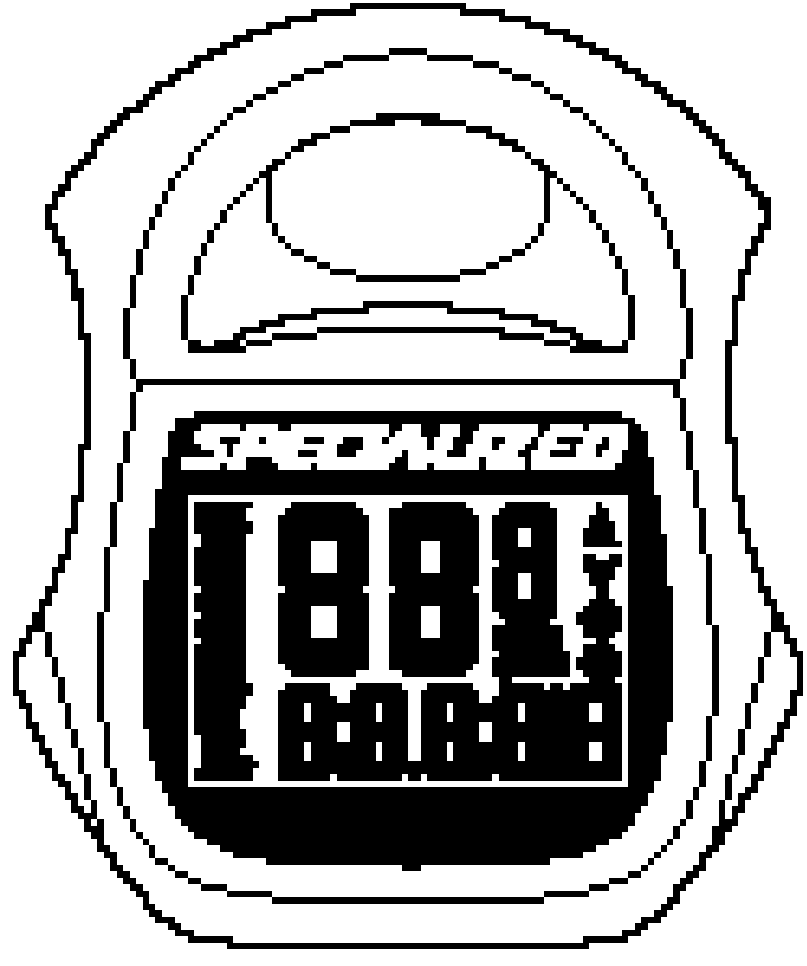
SPEEDZONE PRO CYCLOCOMPUTER

Congratulations on your purchase and welcome to the growing number of cyclists who are discovering a powerful new generation of bicycle computers. Your Specialized SpeedZone® Pro has been designed to provide the best combination of performance, features, durability and ease of use and installation.

The following functions are available on your SpeedZone Pro bicycle computer:

- SPD - Current Speed
- AVS - Average speed
- MAX - Maximum Speed
- ATM - Automatic Start/Timer
- DST - Trip Distance
- ODO - Odometer (total distance)
- ASI - +/- Average Speed Indicator
- TM - Stopwatch
- INT - Interval Timer
- CAD - Cadence
- Digital 12/24 Hour Clock



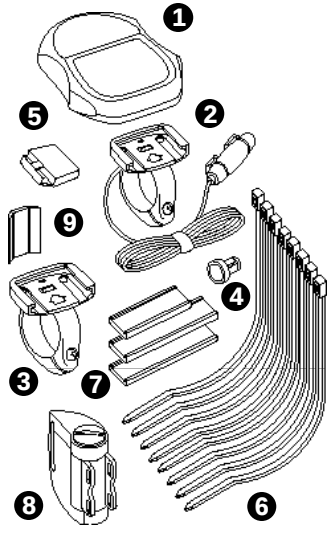
- GR% - Inclinometer
- TMP – Temperature
- ALT – Altimeter
- ALTΔ– Altitude climbed

This computer also features:

- Second Wheel Option
- Easy Calibration Mode
- Wireless Mounting System
- Heavy-duty abrasion resistant pick-up wire
- Water resistant housing
- 2 Year Warranty
- Backlit LCD display

What is included in your SpeedZone Elite package:

1. SpeedZone computer (1)
2. Mounting bracket wired for cadence (1)
3. Mounting bracket w/out cadence wiring (1)



4. Magnet with screw (1)
5. Cadence magnet (1)
6. Cable tie wraps (8)
7. Mounting bracket sizing straps (3)
8. Transmitter (1)
9. Transmitter mounting bracket (1)

MOUNTING THE SPEEDZONE PRO

The SpeedZone Pro wireless transmitter can mount on the right or the left side of the fork blade. The right side should be used on large frames or when a suspension fork is installed. The optimal distance between the computer and the transmitter is 24 inches (610mm) The distance may need to be less than 24 inches (610mm) if ambient temperatures are below 40°F (4°C). To reduce signal loss in colder temperatures, the transmitter should be mounted as close to the computer as possible. (Maximum mounting distance is 28 inches). Use the transmitter-mounting bracket and tie-wraps provided to position the sensor. Do not tighten the tie-wraps until final placement of the magnet is correct. *(See figure 1)*.

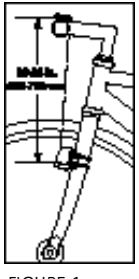


FIGURE 1: SENSOR PLACEMENT

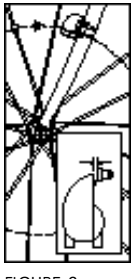


FIGURE 2: MAGNET ATTACHMENT

Attach the magnet to a spoke across from the transmitter with the magnet screw. The clearance between the magnet and the transmitter should be approximately 1/32"-1/16" (1-2mm). Tighten the magnet and transmitter. Do not over-tighten the magnet screw. *(See figure 2)*.

Attach the mount to the handlebar using the bracket screw provided. Tighten so that the bracket cannot rotate on the handlebar. There are several sizing straps provided to fit different diameter bars. *(See figure 3)*.

Slide the computer forward onto the mount until it 'snaps' into place with an audible click. To remove the computer, push it backward until it releases from the mount. To test for proper installation of the magnet, transmitter and computer, activate the computer by pushing the 'MODE' (right side) button. Pick up the front of the bicycle and spin the front wheel. The "wheel option" indicator will flash. If it does not flash, check the sensor and magnet alignment. Realign as necessary until the "wheel option" indicator flashes while spinning the wheel.

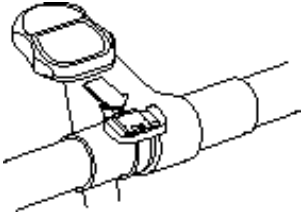


FIGURE 3: MOUNTING BRACKET

MOUNTING CADENCE HARDWARE

In order to use the cadence option you must install the mounting bracket with the wired sensor provided with your SpeedZone Pro. Run the cadence sensor wire along the head tube, down tube and chain stay of your bicycle and secure it into place using the provided tie-wraps. *(See figure 4)*

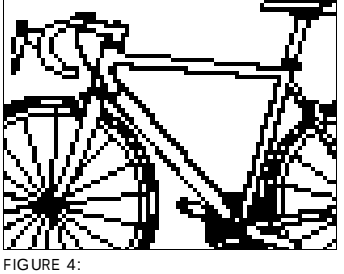


FIGURE 4:
CADENCE WIRE PLACMENT

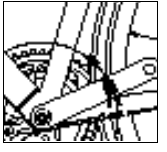


FIGURE 5:
CADENCE SENSOR PLACEMENT

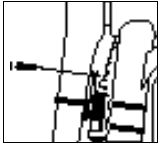


FIGURE 6:
CADENCE MAGNET ATTACHMENT

Next, attach the cadence magnet to the inside of your crank arm directly across from the sensor. Use a tie-wrap to fasten the magnet to the crank arm. *(See figure 5)*.
Do not tighten the tie-wrap until final placement of the magnet is correct. The clearance between the magnet and the sensor should be approximately 1/32"-1/16" (1-2mm). *(See figure 6)* Tighten the magnet and sensor.

PROGRAMMING

Programming the functions of your SpeedZone Pro requires it to be placed in various "modes" (i.e. odometer mode, distance mode). The computer can be cycled through these modes by pressing the "MODE" button located on the right-hand side of the housing. Once a specific mode has been entered, its values can be reset or adjusted by pressing either the "FUNCTION" button located on the left hand side of the housing or by using a combination of the "MODE" and "FUNCTION" buttons.

1. Miles or Kilometers selection

Your SpeedZone Pro will record speed and distance in either miles (M/h) or kilometers (Km/h). To enter your selection of miles or kilometers, push the "MODE" button until ODO (odometer) appears on the left side of the display (This is called the odometer mode). Hold down the "FUNCTION" (left side) button and 'tap' the "MODE" button once. The Km/h, m/h indicator will begin blinking. You may now alternate between miles and kilometers by pressing the "MODE" button. When the correct choice is flashing, select it by pressing the "FUNCTION" button. You will now enter the "Programmable Odometer" mode. If the odometer setting is correct push the "FUNCTION" button five times to exit odometer mode. (Otherwise, see "Setting the programmable odometer" below).

2. Setting the Programmable Odometer

This mode is useful if you have replaced the battery and would like to retain the mileage you have already ridden. To access the programmable odometer mode, first advance the "MODE" button until (ODO) appears on the left-hand side of the screen. Hold down the "FUNCTION" button and 'tap' the "MODE" button once. The Km/h indicator will flash. If the Km/h setting is correct press the "FUNCTION" button once and a five-digit number will appear. You are now in the programmable odometer mode. To enter a mileage into the odometer, press the "MODE" button until the flashing digit is correct. (**Note:** The "MODE" button may be held to scroll to the correct digit.) Press the "FUNCTION" button to select the next digit to the right. Repeat this process until all five digits are entered as your existing mileage.

3. Wheel Circumference Selection

To set the circumference for the type of tires you are using, you can use Specialized's "Easy Calibration Mode" or measure your actual tire circumference by the rollout method. Two different tire diameters may be entered by using the computer's "Second Wheel Option."

Easy Calibration Mode:
Your SpeedZone Pro has been preprogrammed with the following 14 Specialized tire sizes:

26 X 1.0	26 X 2.2
26 X 1.25	650c X 20
26 X 1.5	700c X 20
26 X 1.95	700c X 23
26 X 1.9	700c X 26
26 X 2.0	700c X 32
26 X 2.1	700c X 38

When using Easy Calibration Mode, the SpeedZone Pro will display the tire size on its LCD display screen. *(See figure 7)* The Easy Calibration Mode is accessed by entering the odometer (ODO) mode and holding down the "FUNCTION" button for three seconds. The display will now show the currently selected tire size for wheel option #1.

To scroll through the preprogrammed tire sizes tap both the "MODE" and "FUNCTION" buttons simultaneously. When you reach the desired tire size press the "FUNCTION" button once to select it and enter Easy Calibration Mode for wheel option #2. Follow the same procedure to program the wheel #2 tire size and tap the "FUNCTION" button to exit Easy Calibration Mode.

FIGURE 7: EASY CALIBRATION SCREEN

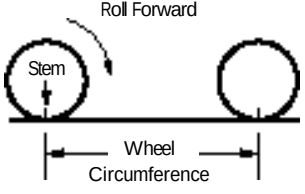


FIGURE 8: ROLL OUT METHOD

Roll Out Method
The roll out method will provide the most accurate computer calibration and can take into account variables such as inflation pressure, rim width and rider weight.

1. Extend a tape measure out to 3000mm (120 inches) and lock it in place.
2. With your tire inflated to its proper pressure, place the valve at the 6:00 position (at the bottom) directly over the start of the measuring tape.
3. Roll the wheel one complete revolution until the valve stem is again at the 6:00 position. Read the tape directly under the valve and note the distance in millimeters. (To convert inches to millimeters, multiply inches by 25.4). Use this number to replace the default (default values are 2073 for wheel one, and 2134 for wheel two) when programming your computer. *(See figure 8)*

You may also use the following quick-reference chart:

Generic Tire Size Chart

(This chart is for non-specialized tires)

26 X 1.75	2140
26 X 2.0	2074
26 X 2.1	2090
650C X 20	1945
700C X 26	2124
700C X 38	2170

Programming the circumference:

To enter the tire circumference number, select the odometer (ODO) mode and hold down the "FUNCTION" button for three seconds. The display will now show the currently selected tire size for wheel option #1. *(See figure 9)* If necessary scroll through the preprogrammed tire sizes by tapping both the "MODE" and "FUNCTION" buttons simultaneously until the display shows a four-digit number. This number represents your tire circumference in millimeters. Press the "MODE" button until the flashing digit is correct. ***(Note:** The "MODE" button may be held to scroll to the correct digit.)* Press the "FUNCTION" button to select the next digit to the right. Repeat the process until all four digits are entered as your tire circumference. Press the "FUNCTION" button once to select it and enter the circumference for wheel option #2. Follow the same procedure to program the wheel #2 tire size and tap the "FUNCTION" button to exit circumference programming mode.

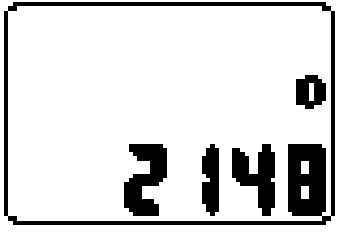


FIGURE 9: CIRCUMFERENCE PROGRAMMING SCREEN

4. Setting the Clock

To access the "clock mode" press and hold the "MODE" button for three seconds. To set the clock, press the "FUNCTION" button for three seconds. The display will flash either twelve (12:) or twenty-four (24:). Select between 12: or 24: mode by pressing the "MODE" button. Press the "FUNCTION" button to set the mode. The hour digit will now begin flashing. Press the "MODE" button to adjust the hour digits and press the "FUNCTION" button to set. The minutes will flash and can be adjusted by pressing the "MODE" button. (Hold the "MODE" button to scroll through the digits quickly) Press the "FUNCTION" button to set the minutes and return to clock mode. *(See figure 10)*

FIGURE 10: CLOCK SCREEN

5. Timer Selection

The timer can be selected for either Automatic Timer Mode (ATM) or Timer Mode (TM). The ATM selection allows you to keep track of your actual riding time. The timer only operates when the wheel is rotating and cannot be turned on or off manually.

The TM selection is just like a conventional stopwatch. The timer is activated manually and records the time whether the wheel is rotating or not. Tapping the "FUNCTION" button starts and stops the stopwatch and holding the "FUNCTION" button for three seconds will reset the stopwatch.

Note: The average speed (AVS) will be calculated differently based upon the selection of ATM or TM. If ATM is selected, the AVS is based upon only riding time. If TM is selected the AVS is based on the total time the stopwatch is turned on or activated. *(See figure 11)*

To select either TM or ATM, first press the "MODE" button until either "TM" or "ATM" appears on the left-hand side of the screen. To alternate between "TM" and "ATM" press the "MODE" and "FUNCTION" buttons simultaneously. Once the desired timer

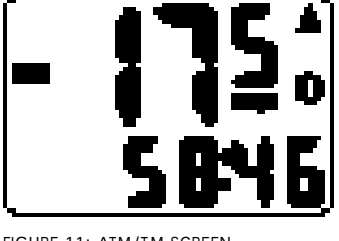


FIGURE 11: ATM/TM SCREEN

mode has been selected, press the "FUNCTION" button to advance to the next operating mode.

6. Interval Timer

Your Speedzone Elite is equipped with an Interval Timer. This feature allows you to customize your training by integrating a programmable repeating countdown timer into your workout. To enter the interval timer mode, press the "MODE" button until "INT" appears on the left-hand side of the screen. You are now in interval timer mode. To set the interval timer, hold the "FUNCTION" button for three seconds. The hour digit will begin flashing. Press the "MODE" Button until the desired number appears. (Hold down the "Mode" button to scroll quickly) Press the "FUNCTION" button once to set this number and advance to minutes. Repeat this process until minutes and seconds are set to the desired settings. Press the "FUNCTION" button to exit programming mode. Once the interval timer is programmed, press the "FUNCTION" button to start/stop the countdown. *(See figure 12)*

Note: The shortest interval that can be set is 5 seconds.

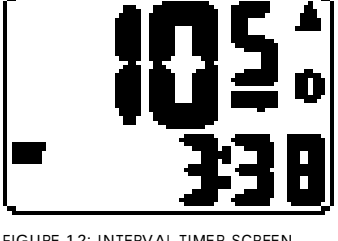


FIGURE 12: INTERVAL TIMER SCREEN

7. Temperature
Your Speedzone Pro is equipped with a thermometer. To enter temperature gauge mode, press the "MODE" button until "TMP" appears on the left-hand side of the screen. To alternate between °F and °C press the "FUNCTION" button.

8. Altimiter
Your Speedzone Pro contains an extremely accurate altimeter that is capable of recording changes in altitude in increments as small as three feet (one meter). This altimeter calculates altitude by precisely measuring barometric pressure. Due to normal changes in barometric pressure, you may need to recalibrate your Speedzone Pro on a daily basis. You should be able to find the altitude where you live on a topographical map or by contacting a nearby airport.

9. Altimeter Calibration
To calibrate your altimeter press the "MODE" button until "ALT" appears on the left-hand side of the screen. Then press the "FUNCTION" button for three seconds. The first altitude digit will begin flashing. Press the "MODE" Button until the desired number appears. Each push of the button will change the altitude one-foot (or meter if you selected metric units). Press the "FUNCTION" button once to set this number and advance to the next. Repeat this process until you have entered the desired altitude. Press the "FUNCTION" button to exit programming mode.

FIGURE 13: AVERAGE SPEED SCREEN

Note: Altitude will be displayed in feet when speed is measured in miles per hour and meters when speed is measured in kilometers per hour.

10. Altitude Gained
The altitude gained function on your Speedzone Pro calculates your total elevation climbed. Descended altitude is not counted.

COMPUTER FUNCTIONS

Speedometer
Speed is always indicated on the top line of the screen. The speed is shown continuously up to 99.9 M/h (99.9 Km/h) with a resolution of 0.1 M/h (0.1 Km/h)

Average Speed (AVS)
The average speed is displayed on the lower line of the screen when AVS is shown on the left. The average speed is based upon whether the ATM or the TM mode has been selected, the resolution of the average speed is shown in 0.1M/h or Km/h increments. *(See figure 13)*

+/- Average Speed Indicator
An up or down arrow displayed in the upper right side of the screen

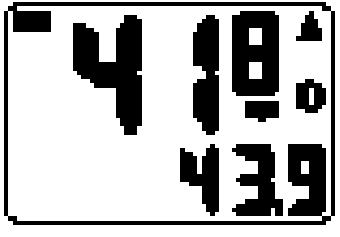


FIGURE 14: MAXIMUM SPEED SCREEN

shows whether the current speed is above or below the average speed.

Maximum Speed (MAX)
The maximum speed is displayed on the lower line of the screen when MAX is shown on the left. The maximum speed is retained in memory and updated when a higher speed is attained. The maximum speed can be reset by pressing the "FUNCTION" button for three seconds. *(Seefigure 14)*

Auto Start/Stop Timer (ATM)
In ATM mode the stopwatch function records the actual time spent riding. It operates only when there is speed input and is displayed on the lower line of the screen.

Timer Mode (TM)
In TM mode the stopwatch function will operate when the "FUNCTION" button is pressed. The stopwatch will record the total time after the button is pressed regardless of whether there is speed input or not. The average speed (AVS) will be calculated based on the time the timer mode is activated.

Interval Timer (INT)
The interval timer is displayed on the lower line of the screen when (INT) appears on the left. The timer indicates the end of an interval with one short beep per second for the last 4 seconds of the interval. This is followed by a long beep, indicating the beginning of a new interval.

Cadence (CAD)
Cadence mode will display your pedaling speed in RPM's (revolutions per minute) on the lower line of the screen. Monitoring how fast you turn your pedals can be used as a tool to enhance the efficiency with which you ride your bicycle. Simply put, the best cadence is a balance between leg speed and pedal pressure. Beginning cyclists typically prefer to pedal at a slower cadence,

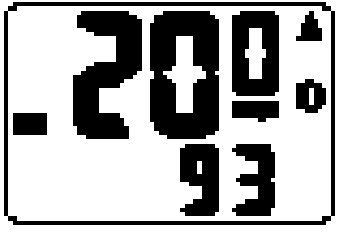


FIGURE 15: CADENCE SCREEN

around 60-rpm, while advanced cyclists and racers are more efficient between 90 and 100 rpm. *(See figure 15)*

Trip Distance (DST)
Trip distance mode will record up to 999.99 miles or kilometers and then roll to zero. The trip distance function can be reset by pressing the "FUNCTION" button for three seconds. The resolution

FIGURE 16: TRIP DISTANCE SCREEN

is 0.01 miles (0.01 Kilometers). The trip distance is shown on the lower line if the screen. *(See figure 16)*

Odometer (ODO)
The odometer will record the total distance traveled up to 99,999 miles or kilometers and then roll to zero. The odometer can be reset by pressing the "FUNCTION" button for three seconds. The total distance is shown on the lower line if the screen. *(See figure 17)*

Inclonometer (GR%)
The inclonometer will display the percent of grade you are climbing or descending in increments of 1%. A negative grade or descent is indicated by a negative sign. (example: –4%)

FIGURE 17: ODOMETER SCREEN

Tech note: The inclinometer calculates percentage of grade by comparing the change in altitude to the distance traveled. This data is updated on the LCD display every 5 seconds and is based upon data accumulated during the previous 20 seconds. It is normal to experience a slight delay when transitioning from one grade to another.

Temperature (TMP)
Your Speedzone Pro is equipped with a thermometer. Temperature can be displayed in either °F or °C.

Programmable Odometer
The odometer digits are programmable. This is convenient for transferring your hard-earned mileage that is usually lost when changing batteries or computers.

Clock
Your SpeedZone Pro is equipped with a digital clock, which is accessed by pressing the "MODE" button for three seconds. The clock can be set to operate in either 12 or 24-hour mode.

Second Wheel Mode
For riders who own more than one bicycle or who frequently change tires, the SpeedZone Pro is capable of storing two tire sizes. You can change between the two sized by pressing both the "MODE" and "FUNCTION" buttons simultaneously for three seconds. The second wheel mode indicator will change from 1 to 2. Mileage recorded will be cumulative between the two sizes. (An accessory handlebar mount is available from your Specialized dealer)

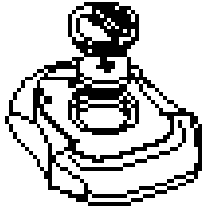


FIGURE 18: BATTERY INSTALLATION

INSTALLING THE BATTERY

Your SpeedZone Pro Computer comes with the battery installed at the factory. Should you need to replace the battery, push the computer backward to remove it from the handlebar mount. Before removing the battery make a note of your odometer reading and wheel circumference settings so that you can re-enter them when you restart the computer. Turn the computer over so the display is facing downward. Use a coin to unthread the battery cap from the computer. Install the battery (model CR2302) with the positive pole (+) facing upward. Carefully thread the battery cap back onto the case with a coin. *(See Figure 18)*

If the LCD display is blank or shows incomplete digits, turn the computer over and press the "AC" button on the bottom of the case with the tip of a pen or a paper clip. This will clear all the data and re-start the computer. Reinstall the computer by pushing it forward into the mount until it snaps into place.

TROUBLESHOOTING

- *Display is blank:*
  Change the battery or press the AC button on the bottom of the case
- *Display shows partial digits:*
  Press the AC button on the bottom of the case.
- *Speed/distance not recording:*
  Check sensor/magnet alignment. Make sure that the sensor is no more than 1/16" (2mm) from the magnet.
- *Entire screen is dark:*
  Did you leave the bike parked in the hot direct sun when it was parked? If so, move the bike to the shade. The data will be OK.
- *Computer moves on handlebar:*
  Tighten mount or add sizing straps to improve fit on handlebar.

IMPORTANT!

- Pay attention to traffic and road conditions at all times. Your first obligation is to be attentive and to ride safely.
- Keep your computer in good shape and use it safely.
- Do not expose it to direct sunlight except when you are riding.
- Do not disassemble it.
- Make sure the magnet and the transmitter are well aligned. Check them regularly.
- Keep the computer and all of its components tightly attached, and check them regularly. If any of the components come loose, it could become tangled in your spokes and cause an accident.

- See your authorized Specialized dealer if you have any trouble installing or maintaining your computer.
- Clean the unit with a mild detergent and a soft dry cloth. Never use any kind of solvent or alcohol.
- The SpeedZone Pro Computer computer is intended for use on bicycles only and should not be used on any motorized vehicle.

WARRANTY INFORMATION

Specialized cycling computers are guaranteed to be free from defects in materials and/or workmanship (excluding battery) for a period of two years from the date of purchase. Specialized will at its option, repair or replace your defective computer.

To receive warranty service send the unit, a copy of the sales receipt and a brief description of the problem to:

Specialized Bicycle Components Inc.
15130 Concord Circle
Morgan Hill, CA. 95037
Attn: Product Services/
Computer Warranty

SPECIFICATIONS

Current Speed
0.0 to 99.9 MPH
0.0 to 99.9 Km/H

Average Speed (AVS)
0.0 to 199.9 MPH
0.0 to 199.9 Km/H

Maximum Speed (MXS)
0.0 to 199.9 MPH
0.0 to 199.9 Km/H

Stopwatch (TM)
0 to 9hrs, 59min, 59sec. recycling type

Automatic Timer (ATM)
0 to 9hrs, 59min, 59sec. recycling type

Interval Timer (INT)
5 sec. to 9hrs, 59min, 59sec.

Trip Distance (DST)
0 to 999.99 miles or Km

Odometer (ODO)
0 to 99,999 miles or Km

Operating Temperature
40°F to 104°F (4°C to 40°C)

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